

T News Letter **TDARS**

G3ZME
G6ZME

TELFORD AND DISTRICT AMATEUR RADIO SOCIETY

www.TDARS.org.uk

FOUNDED 1969

www.TelfordHamfest.co.uk

Issue 301

Aug-Sept 2021

www.TDARS.org.uk

Programme

www.telfordhamfest.co.uk

LWVH = Meeting at Little Wenlock Village Hall

UPDATE NOTICE: **MOST MEETINGS AT LWVH FROM AUGUST: BUT CHECK BELOW**
Wearing of face masks in LWVH room strongly recommended

- July 28 Post-Lockdown 2 metre local DF (Fox) Hunt ! 7:30 pm start (144.600 MHz FM)
(LWVH)
- August 4 HamFest Committee Meeting (19:30). General C M after. 2m ragchew 144.6MHz
- August 6 (Fri.) Megacycle 2021 Charity cycle marathon by Kevin G0PEK and daughter
Lauren 2E0HLR—social meet-up; venue & time to be confirmed. (Heather/Paul)
- August 11 HamFest Preparation for all members. Volunteers step forward. LWVH
- August 18 Surplus Sale. A lot of radio equipment has accumulated at LWVH attic. It needs
sorting prior to sale at the HamFest. Want to make an offer? Come along!
[This is not the usual members' auction sale, which takes place later in the year]
- August 25 Telford HamFest. Final organisation meeting. 8pm. LWVH
- September 1 HamFest Committee Meeting (19:30 LWVH). General CM follows. 2m ragchew
- September 5 (Sun) TELFORD HAMFEST AT HARPER ADAMS UNIVERSITY, EDMOND**
- September 8 Walking Foxhunt (DF) #2. First transmission 19:30 BST 144.600 MHz FM
Start at LWVH
- September 15 HamFest debrief. 20:00 hrs LWVH
- September 22 This year's Construction competitions: Show and Tell for real ! LWVH
- September 29 EMC/EMF. Guest speaker via Webex at LWVH. TBC.
- October 6 Committee Meeting LWVH. 2m FM net 144.600 MHz.

For Equipment Loans & Returns contact Don M0TBQ.

For "Beyond Exams" scheme (Club or Individual) —enquiries to Graham G7LMF

For Morse Training and Morse Proficiency Tests Martyn G3UKV or Eric M0KZB.

Radio Amateur Exams- Latest: Contact Graham G7LMF training@tdars.org.uk

VILLAGE HALL, MALTHOUSE BANK, LITTLE WENLOCK, TELFORD, SHROPSHIRE. TF6 5BG

Editorial

After a busy past year, guess what—a busy few weeks ahead for TDARS. Bookings for our HamFest at Harper Adams Uni. have steadily trickled in, Several 'regulars' have decided to give this year's rally a miss, whereas others have welcomed the return of the event with open arms, and indeed have even booked extra tables. So, with my optimistic hat on, the HamFest will be a successful go-er for September, even if some stands (including the RSGB Book-stand) will be absent. I've certainly got a shopping list of some bits and bobs I need. Bring it on. . . .

One forthcoming event which I hope members will also support is the meeting (at LWVH) booked for Wed. September 22nd, which is a 'Show & Tell' occasion, giving those who made an entry in the two on-line construction competitions in January ('Under £5') and March ('Main Construction Comp.'), the chance for us to hear about and even examine their efforts for real. If you made an entry at either opportunity, please bring it (or them) along to LWVH that evening. Of course, if any member has made another project in the meantime, please bring that along to share with the rest of us. Home construction at all levels continues to be one of the hallmarks and satisfying outcomes of our shared hobby.

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Telfordhams

TELFORD & DISTRICT AMATEUR RADIO SOCIETY : 2021-22

CHAIRMAN: Simon Bird G0UFE (telfordslivewire@hotmail.co.uk Tel: 01952 401018)

VICE-CHAIRMAN: Martyn Vincent G3UKV (ukv@ukv.me.uk Tel:01952 255416)

SECRETARY: John Humphreys M0JZH (m0jzh@yahoo.co.uk Tel:07824 737716)

TREASURER: Paul Athersmith M0PLA (paul.athersmith@gmail.com Tel:07966 969230)

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PUBLICITY/WEBMASTER : Dave GOCER (davekh@gmail.com)

Committee: Graham G7LMF; Ian M0IRP; Village Hall Committee Liaison officer Martin 2E0TRO.

QSL Manager Paul M0PNN; Assist Curator: Chris 2E0EOH; Trophies/Certs: Martyn G3UKV.



@g3zme



County's pandemic heroes are honoured by the Queen

Report by Dominic Robertson

THE county's heroes of the pandemic are front and centre in a Queen's Birthday Honours list which reflects on the most extraordinary 15 months in living memory.

The community response to the pandemic is a feature of those recognised by Her Majesty, and no one was more proud to be included than Telford security guard Trevor Bate.

Mr Bate, 55 and from Hollinswood, spoke of being overwhelmed and humbled at learning he would be awarded the British Empire Medal (BEM) – specifically for his services during the pandemic.

As the lockdown hit in March last year and people became aware of the impact Mr Bate immediately put himself forwards as a volunteer with the council, the police, and the NHS

He took on the role of delivering prescriptions during the day – up to 60 a day – and continuing working on his nightshift as a security guard at night.

Joined by his wife Louise and his friend Robert Cotterill, who also delivered the prescriptions, what had started as just helping those in Brookside and Stirchley expanded across the town. It remains one of the symbols of the pandemic as scores of volunteers stepped up to ensure people would still have shopping, or vital medicine.

Overwhelming

Speaking of his pride, an emotional Mr Bate said: "I am just absolutely humbled. I received the email a few weeks ago and I thought it was a wind-up. It so difficult to explain how overwhelming it is."

Mr Bate, who has also delivered food to those who need it during lockdown, said that his only drive had been to help the commu-



Trevor Bate from Telford will receive the BEM for his services delivering prescriptions



Consultant John Alexander gets the MB



An MBE for warrant officer Angus Bartal

The headline says it all.
Congratulations Trevor.

Past member of TDARS, Trevor Bate 2E0TTB, recently received a Queen's Birthday Honour Award in the form of a BEM. Pictured left, he said he felt "overwhelmed and honoured" at receiving the honour for his services to the local community.

His wife, Louise, also known by many club members, supported his hard work liaising with the local council, police and the NHS.

Qtc: News & Information



TDARS MEETINGS EVERY WEDNESDAY EVENING HELD NORMALLY AT LITTLE WENLOCK VILLAGE HALL

SEE PROGRAMME PAGE 1 FOR LATEST MEETING VENUES & ARRANGEMENTS

Please note: A current membership card may be required to borrow TDARS equipment. Please return borrowed equipment promptly .

The use of Webex online for TDARS has continued to be a great success, with outside presenters covering a diverse range of topics in the past couple of months, including the microwave bands (G4LDR), amplitude modulation (MW0NWM) and the summer charity cycling event (G0PEK & 2E0HLR), magnetic loops (G0RVM); not forgetting our own members' contributions, including Paul's (M0PLA) showing of the possibilities and practicalities of 3D printing.

There are a few past members of TDARS who have not yet renewed their **annual subscriptions for 2021-22**. The reduced sub. rate for the current year is £25 or £19 for 'non-earning' . Contact our Hon. Treasurer, Paul M0PLA (see pg. 2 details) to settle up and enjoy all the benefits of membership.

At the very enjoyable **B-B-Q held recently, five trophies and a certificate of merit** were handed out by Simon G0UFE, our Chairman.



Working the Night Shift—Paul M0PLA



David M0YDH
Construction Trophy



Dave G0CER
Syd Poole Trophy



Paul M0PLA
'Under a Fiver' Trophy



Graham G7LMF
DF Trophy
(2019)



Graham G7LMF
Jack Hassall Trophy
(See cert. above)

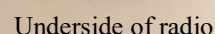
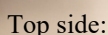
Apart from the B-B-Q, **Little Wenlock Village Field** has been a useful alternative to the Village Hall during summer lockdown times. It has been good to meet members in person, whilst maintaining social distancing etc. The weather has been kind to us, and nearby car parking has not been a problem. Plus, a Webex screen shot taken in the spring to fill a gap!



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A few alternatives to buying expensive transceiver power supplies (PSU) at £50-£200 have been discussed by members, available from as little as £10. But you do need a bit of background knowledge to get them functional for our purposes. Shabaz has provided the following link which helps this learning process:- <https://1drv.ms/b/s!AlgR3ZgXGd0MnzuOQga-yowPTxn1> .

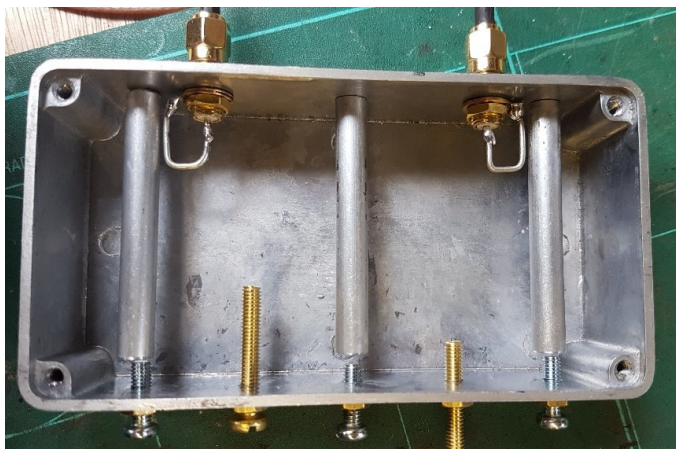
"I finally got around to trying to build a simple radio, this uses Silicon Labs Si4825 chip, which uses a variable resistor for tuning. It is only broadcast bands unfortunately (limitation of the chip) although in theory it could do HF bands with AM demodulation (not SSB). I hard-wired it for FM broadcast band. Anyway, I'll put the Gerber files and circuit diagram online soon. The smallest parts are 0805 sized, which is quite large, so this was all assembled with a normal soldering iron. There's only 17 resistors and 15 capacitors or so, and a couple of ICs so it took just a few hours to solder up last night.



The potentiometers and knobs and speaker (not shown) were from AliExpress. “

[Will also tune to 1296MHz (23cm) amateur band—Ed]

I've completed a band pass filter towards 1255 MHz ATV. The BATC wiki pointed to this link http://www.w6pql.com/23cm_filters.htm



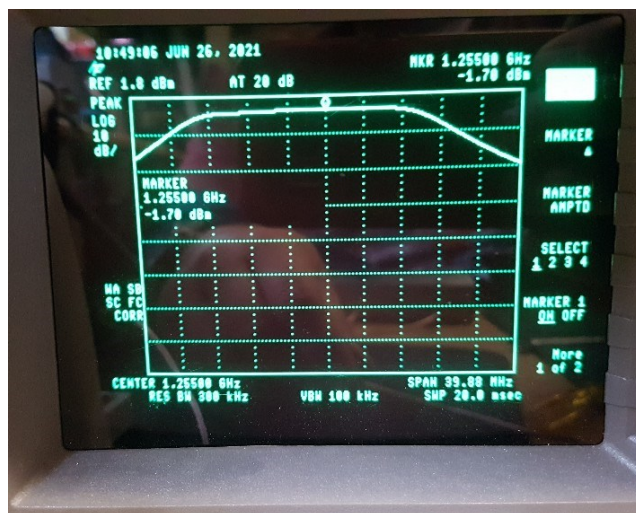
Chapter 11 of the RSGB international microwave handbook has the explanation why this piece of witchcraft behaves as pictured! Perhaps Ron would like to write an explanation?

It uses a die cast box. I bought some dia. 6mm aluminium bar from EBay and, at the end of a day working as a machinist at the Bala Lake Railway, I drilled the bars dia 2.5 for later M3 thread, faced and parted them to 50 mm long on the lathe. Screws are now M4 brass which gave a 0.5 dB improvement over zinc plated steel screws.

I changed the connectors to SMA from the design's BNC and fashioned a 12mm long loop from 18 gauge wire for each connector. Blutak and a 1mm thick washer for setting the gap were handy during soldering.

Over on the spectrum analyser, the tracking generator was turned on. The connecting cables and a coupler were measured and I found I could alter the source power to 0 dBm [1mW]. I connected the filter in place of the coupler and began adjustment of all the screws over and over again. An hour later I had the -1.7dBm for the pass band and a fair band for 1249 MHz repeater input and 1255 MHz simplex TV. The design quotes an insertion loss of 1.5 dB. To get a smaller loss I would have to machine an aluminium alloy body to further reduce the resistivity of the components. This will do for now.

[Ed. Note: I made a very similar filter from an old RSGB VHF-UHF Manual (3rd. Edition) and on the narrow band portion of 23cm, they are a doddle to line up by simply tuning for max. smoke with TX and power meter. Here, David has needed more care to get a broad passband response for DATV]



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More Bits and Pieces

Kanga Products has changed hands after many years from Dennis G6YBC to Jason Woodman M0NYW. Still offering a similar useful line of products, although the website does not seem to be properly functioning at this time. See www.kanga-products.co.uk

Editor's choice. On the G-QRP reflector, this suggestion from Charles W2SH: "Cut small strips of painters' masking tape. Center one of these on the SMD to be able to pick it up. Position it where it belongs on the board and strap it down to the board. Remove the tape after soldering."

Thanks for Newsletter input this time:

**Peter G4URT, Mike G3JKX, David M0YDH,
Robin G1MHU, Dave G0CER, Shabaz, Dave G8VZT
Next edition Sept. / Oct. 2021**

Can YOU contribute something?— Don't just leave it to someone else !

2 metre DX – by Mike G3JKX



In the early 60s, whilst serving with No 17 (Photographic Reconnaissance) Squadron RAF, we flew to 'somewhere' in North Africa with our PR9 Canberras. Boy—was it hot there, especially under the aircrafts' plexiglass cockpit covers. Even with shades over the top it was still extremely warm inside.

On one aircraft, one of the VHF sets (10 crystallised channels of AM!) was reported 'u/s'. The complicated tuning mechanism used to select the appropriate frequency and tune all the crystal oscillator multipliers had an annoying habit of 'going off tune'. The frequency

of the crystals would be affected by the heat within the aircraft on the ground and, due to the intense cold at altitude, when airborne. Why? Because the sets were not in a pressurised part of the aircraft. The output frequencies were therefore bound to change. This did not matter so much because the VHF receivers in use by Air Traffic Control were quite old, in those days, and had over 100kHz bandwidth!!! (I had to close down on 2m as my signal from my married quarters was, to say the least, a tad stronger than that from aircraft.) But I digress.

Out I go onto the scorching tarmac, headphones akimbo, and opened the radio compartment hatch in the side of the fuselage by the port engine intake. Whipping off the front cover revealed the 10 crystals and the tuning mechanism. Tuning up did not take long but, on tuning the last channel, I was absolutely astonished to hear the controller in Lossimouth tower, in North Scotland, loud and clear. The VHF aerals on Canberras are just two blades embedded in the plexiglass dome. By any stretch of the imagination, this was real VHF DX on just a 1/4 wave aerial only five feet off the ground! So, you just never know how far your VHF signals might go if conditions are right.



73 Mike G3JKX

PS: It is not generally known, but one channel on these sets was sometimes set in the 2m amateur band.



Amateur Radio Versus Food and Drink.... By Peter G4URT

The other day I was musing about different types of radio communication systems / modes etc whilst monitoring FT8 on 2m and eating a sarnie. It occurred to me that a parallel could be struck between amateur radio and different foods and drink. Please bear with me and do not forget the following caveat – 'this is all TONGUE IN CHEEK'.....anyone taking offence will be pointed in the general direction of the nearest doctor who performs sense of humour transplants.

The following examples are various facets of amateur radio with their associated culinary equivalents. Enjoy....

FT8 – it is a bit like a Pot Noodle. In theory it sounds like a good idea (quick and easy) but in reality it **doesn't satisfy**.

FM. Chicken Korma. Inoffensive.

FM repeaters – yes, all well and good but who would like to eat beans on toast day in, day out?

SpE / Ducting / lifts in general. Like going for a long country walk in the summer, turning a corner and finding a traditional pub serving decent beer in a pretty beer garden with a chalk stream running through it. Heaven but it can be difficult finding a seat as everyone else has already discovered it.

>>>>> continued

>>>>>> continued

Here's what David replied to Martyn's request for a bit more information:- (12th June)

" Hi Martyn

I'm packed and about to go to the new spot on Magpie Hill near Clee Hill quarry. I think jab No2 hasn't harmed me.

I haven't been there before. It's on the road to Random Farm pictured . IO82RJ. Of course you can join me or roam around trying other locations to work me. I'll text to tell you how the site is. "

(Ed:- Other things got in the way, and I didn't get out with my basic 5.6GHz FM TV to try and QSO on that band. Sorry David)



And the results (13th June)



" Lots of sunbathing time is available waiting for the BATC committee to work through every microwave band..... " (M0YDH)